BOOK REVIEW

Key Environments: Antarctica edited by W. N. Bonner and D. W. H. Walton. Pergamon Press, Oxford, 1985. x + 381 pp. £14.95. ISBN 0 08 028881 2.

Many biologists are equivocal about conservation. They see the need for it but are nervous because of the often emotional approach of conservationists and the sometimes glib and simplistic arguments they use. This series of books, produced in collaboration with the International Union for Conservation of Nature and Natural Resources and with the blessing of the Duke of Edinburgh, is intended to provide reliable and objective information about areas of international ecological importance and must surely thus have the approval of professional biologists. Antarctica was an obvious candidate for inclusion in the series but there have been several books published recently on Antarctic biology so that the need for another at this time might be questioned. This book does, however, fill a gap; it is not a picture book (although it is very well illustrated), it is not a collection of research reviews but is wide and comprehensive in scope, and it is less expensive than its nearest rival.

It is a tightly organized book with sections dealing with the physical background, terrestrial and marine habitats, each with a brief general introduction, and final chapters concerned with wider aspects including an overview of the whole ecosystem, conservation and exploitation. The opening chapter, on history and exploration in Antarctic biology, is admirable. The authors have researched their subject thoroughly and show how biological research has been determined by and itself influenced the other various interests behind the exploration of Antarctica. Much of the material in the main part of the book, dealing with plankton, fish, birds, mammals and so forth, will be familiar to the Antarctic biologist but he will be glad to have it assembled by experts, drawn from six countries, in compact, up-to-date and well presented form. Some topics, for example squid and the biogeography of the sub-Antarctic islands, he might have difficulty in finding dealt with elsewhere in such an explicit and concise manner. The layman is nearly always given sufficient background to lead him into a subject and the text is readable without sacrifice of scientific rigour. It is always possible for a reviewer to find something which has been missed out. I pick on bacteria, the activity of which in the Southern Ocean appears to be much greater than one might expect and which are probably a not altogether negligible item in the food chain but which are not even mentioned in the index. True, no one is yet concerned about the conservation of bacteria but they are major agents in the cycling which is basic to all ecosystems and they should not be ignored by those who attempt to manage natural environments.

A final chapter reviews the effects of Man's past activities on Antarctica and the prospects ahead. The Antarctic Treaty and its 'Agreed Measures' have so far worked amazingly well – although it is disconcerting to learn that the two regular tourist vessels are registered in countries which have not acceded to the Treaty, so that their activities cannot be controlled, and yet some nations which have acceded and which operate Antarctic bases are often more neglectful of conservation principles than are the tourists. Prospects look gloomy in the foreseeable future if the price of oil goes up and the exploitation of the probably considerable reserves in Antarctica becomes economically feasible. It is intended that further editions of the books in this series will examine significant changes. Let us hope that the next Antarctic volume will record the filling of gaps in our knowledge and not deterioration in an environment which some of us do indeed feel emotional about.

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